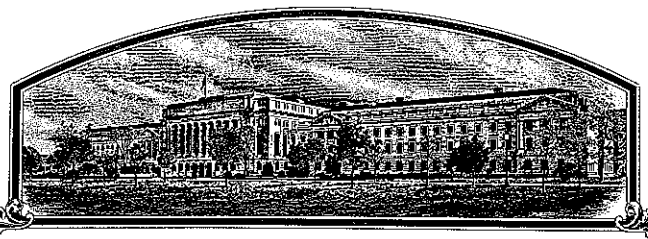

No. 9700119

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Kentucky Agricultural Experiment Station

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED, PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. IN THE UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS SPECIFIED BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

WHEAT, COMMON

'Foster'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this thirtieth day of July in the year of our Lord one thousand nine hundred and ninety-nine.

Attest:

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Secretary of Agriculture

REPRODUCE LOCALLY. *Include form number and date on all reproductions.* FORM APPROVED - OMB NO. 0581-0055

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY DIVISION - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) *(as it is to appear on the Certificate)*

Kentucky Agricultural Experiment Station

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER

KY 856-31-6

3. VARIETY NAME

Foster

4. ADDRESS *(Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)*

S-123 Agricultural Science Bldg. North
University of Kentucky
Lexington, KY 40546-0091

5. TELEPHONE *(include area code)*

606-257-4772

6. FAX *(include area code)*

606-257-2185

FOR OFFICIAL USE ONLY

PVPO NUMBER

9700119

FILING DATE

Feb. 11, 1997

FEES RECEIVED

FILING AND EXAMINATION FEE:

$ 2450.00

DATE

Jan. 21, 1997

CERTIFICATION FEE:

$ 300

DATE

6/4/97

7. GENUS AND SPECIES NAME

Triticum aestivum

8. FAMILY NAME *(Botanical)*

Gramineae

9. CROP KIND NAME *(Common name)*

Soft red winter wheat

10. IF THE APPLICANT NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION *(corporation, partnership, association, etc.) (Common name)*

Land Grant University

11. IF INCORPORATED, GIVE STATE OF INCORPORATION

12. DATE OF INCORPORATION

13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS

Dr. David A. Van Sanford
Department of Agronomy
N-106k Agricultural Science Bldg. North
University of Kentucky
Lexington, Ky 40546-0091

14. TELEPHONE *(include area code)*

606-257-5811

15. FAX *(include area code)*

606-257-2185

16. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED *(Follow instructions on reverse)*

a. ☒ Exhibit A. Origin and Breeding History of the Variety
b. ☒ Exhibit B. Statement of Distinctness
c. ☒ Exhibit C. Objective Description of the Variety
d. ☒ Exhibit D. Additional Description of the Variety *(Optional)*
e. ☒ Exhibit E. Statement of the Basis of the Applicant's Ownership
f. ☒ Voucher Sample *(2,500 viable untreated seeds or, for tuber propagated varieties verification that tissue culture will be deposited and maintained in an approved public repository)*
g. ☒ Filing and Examination Fee ($2,450), made payable to "Treasurer of the United States" *(Mail to PVPO)*

17. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY, AS A CLASS OF CERTIFIED SEED? *(See Section 83(a) of the Plant Variety Protection Act)*

☒ YES *(If "yes," answer items 18 and 19 below)* ☐ NO *(If "no," go to item 20)*

18. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?

☒ YES ☐ NO

19. IF "YES" TO ITEM 18, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED?

☒ FOUNDATION ☒ REGISTERED ☒ CERTIFIED

20. HAS THE VARIETY OR A HYBRID PRODUCED FROM THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETED IN THE U.S. OR OTHER COUNTRIES?

☒ YES *(If "yes," give names of countries and dates)* ☐ NO

Registered seed sold in U.S. in October, 1996

21. The applicant(s) declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.

The undersigned applicant(s) is(are) the owner(s) of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Applicant(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF APPLICANT *(Owner(s))*	SIGNATURE OF APPLICANT *(Owner(s))*
David A. Van Sanford	C.O. Little
NAME *(Please print or type)*	NAME *(Please print or type)*
David A. Van Sanford	C.O. Little
CAPACITY OR TITLE: Professor and Wheat Breeder	DATE: 12/13/96
CAPACITY OR TITLE: Dean and Director, Kentucky Agric. Expt. Station	DATE

STD-470 (03-96) *(Previous editions are to be destroyed)* *(See reverse for instructions and information collection burden statement)*

EXHIBIT A.

ORIGIN AND BREEDING HISTORY OF FOSTER

Parentage: cross KY 83-60 / 'Tyler' // KY 83-75
Date of Cross: March 1984

Foster was derived from the cross KY 83-60 / 'Tyler' // KY 83-75. KY 83-60 and KY 83-75 were selections from bulk populations provided by T. M. Starling, formerly small grains breeder at Virginia Polytechnic Institute and State University. The pedigree of KY 83-60 is 'Coker 65-20' /'Arthur'/4/ 'Chul' *8 CC// VA 68-22-7/ 'Abe'/3/ VA 72-54-14. The pedigree of KY 83-75 is 'Suwon 92' / Arthur// Arthur/ VA 70-52-2. The three-way cross, (KY 83-60 / 'Tyler') // KY 83-75 was made in the 1984 spring greenhouse at Lexington, KY. The F_1 row was grown in the field near Lexington, KY in 1985. Seeds harvested from this row were grown in 1985-86 F_2 bulk plots near Lexington, KY. Individual heads were selected, and F_3 headrows were grown near Lexington, KY the following year. The F_3 headrow which gave rise to Foster was harvested in bulk and grown in an F_4 bulk plot at Lexington in 1987-88. Ninety-eight F_4 heads were selected from this bulk plot and grown as F_5 headrows. Forty heads were selected for F_6 headrows. Four F_7 headrows were selected and harvested separately. A single F_8 progeny plot was increased in the F_9 and F_{10} generations to produce F_{11} breeder seed. The selection that became Foster was selected for disease resistance and excellent agronomic characteristics and grown in a PT1 trial near Lexington, KY in 1990. Foster has been in advanced testing from 1991 to the present and was in the 1993-94 and 1994-95

Uniform Eastern Soft Red Winter Wheat Nursery under the experimental number, KY 85C-31-6.

Foster has been uniform and stable since 1994. Variants have been observed at the following frequencies: awned plants - 0.03%; tall plants with compact spikes - 0.02%; tall plants with lax spikes 0.04%. Up to 1% variant plants may be encountered in subsequent generations.

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EXHIBIT B.

STATEMENT OF DISTINCTNESS

Foster is most similar to the soft red winter wheat FFR 555w. However, it can be easily distinguished by the following morphological characteristics:

-Foster has green plant color (Value: 4/, Chroma: /4, Green color chart, Munsell Book of Color, Vol. 1, 1929-1942, Munsell Color Co., Inc., Baltimore, MD) at booting (Lexington, KY 1994 -1996)
-FFR 555w has blue-green plant color (Value: 5/, Chroma: /6, Blue-Green color chart, Munsell Book of Color, Vol. 1, 1929-1942, Munsell Color Co., Inc., Baltimore, MD) at booting (Lexington, KY 1994 -1996)

-Foster has a lax spike (Lexington, KY 1994 -1996)
-FFR 555w has a middense spike (Lexington, KY 1994 -1996)

-Seeds of Foster have a shallow crease and a long brush (Lexington, KY 1994 -1996)
-Seeds of FFR 555w have a deep crease and a medium brush (Lexington, KY 1994 -1996)

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U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE DIVISION
BELTSVILLE, MARYLAND 20705

EXHIBIT (Wheat)

OBJECTIVE DESCRIPTION OF VARIETY
WHEAT (*Triticum* spp.)

NAME OF APPLICANT(S)
Kentucky Agricultural Experiment Station

ADDRESS (*Street and No. or R.F.D. No., City, State, and Zip Code*)
S-123 Agricultural Science Bldg. North
University of Kentucky
Lexington, KY 40546-0091

FOR OFFICIAL USE ONLY

PVPO NUMBER

VARIETY NAME
Foster

TEMPORARY OR EXPERIMENTAL DESIGNATION
KY 85C-31-6

PLEASE READ ALL INSTRUCTIONS CAREFULLY: Place the appropriate number that describes the varietal character of this variety in the boxes below. Place a zero in the first box (e.g. [ ][ ][ ] or [ ][ ]) when number is either 99 or less or 9 or less respectively. Data for quantitative plant characters should be based on a minimum of 100 plants. Comparative data should be determined from varieties entered in the same trial. Royal Horticultural Society or any recognized color standard may be used to determine plant colors; designate system used: _____.

Please answer all questions for your variety; lack of response may delay progress of your application.

1. KIND:

[1] 1=Common 2=Durum 3=Club 4=Other (SPECIFY) _____

2. VERNALIZATION:

[2] 1=Spring 2=Winter 3=Other (SPECIFY) _____

3. COLEOPTILE ANTHOCYANIN:

[1] 1=Absent 2=Present

4. JUVENILE PLANT GROWTH:

[2] 1=Prostrate 2=Semi-erect 3=Erect

5. PLANT COLOR (boot stage):

[2] 1 = Yellow-Green 2 = Green 3 = Blue-Green

6. FLAG LEAF (boot stage):

[1] 1 = Erect 2 = Recurved [1] 1 = Not Twisted 2 = Twisted

7. EAR EMERGENCE:

[0][5] Number of Days Earlier Than Pioneer Brand 2510 *

[0][3] Number of Days Later Than Madison *

8. ANTHER COLOR:

[1] 1 = YELLOW 2 = PURPLE

9. PLANT HEIGHT (from soil to top of head, excluding awns):

[0][4] cm Taller Than FFR 555W *

[0][9] cm Shorter Than Verne *

5

10. STEM:

A. ANTHOCYANIN

[1] 1= Absent 2=Present

B. WAXY BLOOM

[2] 1=Absent 2=Present

C. HAIRINESS (last internode of rachis)

[1] 1=Absent 2=Present

D. INTERNODE (SPECIFY NUMBER) 3

[1] 1=Hollow 2=Semi-solid 3=Solid

E. PEDUNCLE

[2] 1=Absent 2=Present

[29] cm Length

11. HEAD (at Maturity):

A. DENSITY

[1] 1=Lax 2=Middense 3= Dense

B. SHAPE

[1] 1 = Tapering 2= Strap 3 = Clavate 4 = Other (SPECIFY) ____

C. CURVATURE

[3] 1 = Erect 2 = Inclined 3 = Recurved

D. AWNEDNESS

[3] 1 = Awnless 2 = Apically Awnletted 3 = Awnletted 4 = Awned

12. GLUMES (at Maturity):

A. COLOR

[1] 1 = White 2 = Tan 3 = Other (SPECIFY) ____

B. SHOULDER

[3] 1 = Wanting 2 = Oblique 3 = Rounded 4 = Square 5 = Elevated 6 = Apiculate

C. BEAK

[1] 1 = Obtuse 2 = Acute 3 =Acuminate

D. LENGTH

[2] 1 = Short (ca. 7mm) 2 = Medium (ca. 8mm) 3 = Long (ca. 9mm)

E. WIDTH

[1] 1 = Narrow (ca. 3mm) 2 = Medium (ca. 3.5mm) 3 = Wide (ca. 4mm)

13. SEED:

A. SHAPE

[1] 1 = Ovate 2 = Oval 3 = Elliptical

B. CHEEK

[1] 1=Rounded 2=Angular

C. BRUSH

[3] 1=Short 2=Medium 3=Long

[1] 1 = Not Collared 2 = Collared

D. CREASE

[1] 1 = Width 60% or less of Kernel
2 = Width 80% or less of Kernel
3 = Width Nearly as Wide as Kernel

[1] 1 = Depth 20% or less of Kernel
2 = Depth 35% or less of Kernel
3 = Depth 50% or less of Kernel

13. SEED: (continued)

E. COLOR

[3] 1 = White 2 = Amber 3 = Red 4 = Other (SPECIFY) _____

F. TEXTURE

[2] 1=Hard 2=Soft

G. PHENOL REACTION *(see instructions)*:

[4] 1 = Ivory 2 = Fawn 3 = Light Brown 4 = Dark Brown 5 = Black

14. DISEASE: (0=Not Tested; 1=Susceptible; 2=Resistant; 3=Intermediate; 4=Tolerant)

PLEASE INDICATE THE SPECIFIC RACE OR STRAIN TESTED

Stem Rust *(Puccinia graminis* f. sp. *tritici)*
[2] tested w/numerous races; has SR 24

Leaf Rust *(Puccinia recondita* f. sp. *tritici)*
[2] tested w/numerous races; unable to identify specific resistance genes

Stripe Rust *(Puccinia striiformis)*
[0] _____

Loose Smut *(Ustilago tritici)*
[0] _____

Tan Spot *(Pyrenophora tritici-repentis)*
[0] _____

Flag Smut *(Urocystis agropyri)*
[0] _____

Halo Spot *(Selenophoma donacis)*
[0] _____

Common Bunt *(Tilletia tritici* or *T. laevis)*
[0] _____

Septoria nodorum (Glume Blotch)
[3] _____

Dwarf Bunt *(Tilletia controversa)*
[0] _____

Septoria avenae (Speckled Leaf Disease)
[0] _____

Karnal Bunt *(Tilletia indica)*
[0] _____

Septoria tritici (Speckled Leaf Blotch)
[3] _____

Powdery Mildew *(Erysiphe graminis* f. sp. *tritici)*
[2] Adult plant resistance; race(s) unknown

Scab (*Fusarium* spp.)
[3] _____

"Snow Molds"
[0] _____

"Black Point" (Kernel Smudge)
[0] _____

Common Root Rot *(Fusarium, Cochliobolus* and *Bipolaris* spp.)
[0] _____

Barley Yellow Dwarf Virus (BYDV)
[1] _____

Rhizoctonia Root Rot *(Rhizoctonia solani)*
[0] _____

Soilborne Mosaic Virus (SBMV)
[0] _____

Black Chaff *(Xanthomonas campestris* pv. *translucens)*
[0] _____

Wheat Yellow (Spindle Streak) Mosaic Virus
[2] Race(s) unknown

Bacterial Leaf Blight *(Pseudomonas syringae* pv. *syringae)*
[0] _____

Wheat Streak Mosaic Virus (WSMV)
[0] _____

Other (SPECIFY) _____
[ ] _____

Other (SPECIFY) _____
[ ] _____

Other (SPECIFY) _____
[ ] _____

Other (SPECIFY) _____
[ ] _____

Other (SPECIFY) _____
[ ] _____

Other (SPECIFY) _____
[ ] _____

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15. INSECT: (0=Not Tested; 1=Susceptible; 2=Resistant; 3=Intermediate; 4=Tolerant)

PLEASE SPECIFY BIOTYPE (where needed)

Hessian Fly *(Mayetiola destructor)*
[1] Susceptible to all biotypes

Stem Sawfly *(Cephus spp.)*
[0]

Cereal Leaf Beetle *(Oulema melanopa)*
[0]

Russian Aphid *(Diuraphis noxia)*
[0]

Greenbug *(Schizaphis graminum)*
[0]

Aphids
[0]

Other (SPECIFY)
[ ]

Other (SPECIFY)
[ ]

Other (SPECIFY)
[ ]

Other (SPECIFY)
[ ]

Other (SPECIFY)
[ ]

Other (SPECIFY)
[ ]

16. ADDITIONAL INFORMATION ON ANY ITEM ABOVE, OR GENERAL COMMENTS:

Agronomic Data for Foster and Similar Adapted SRW Wheat Varieties in Kentucky , 1995-96

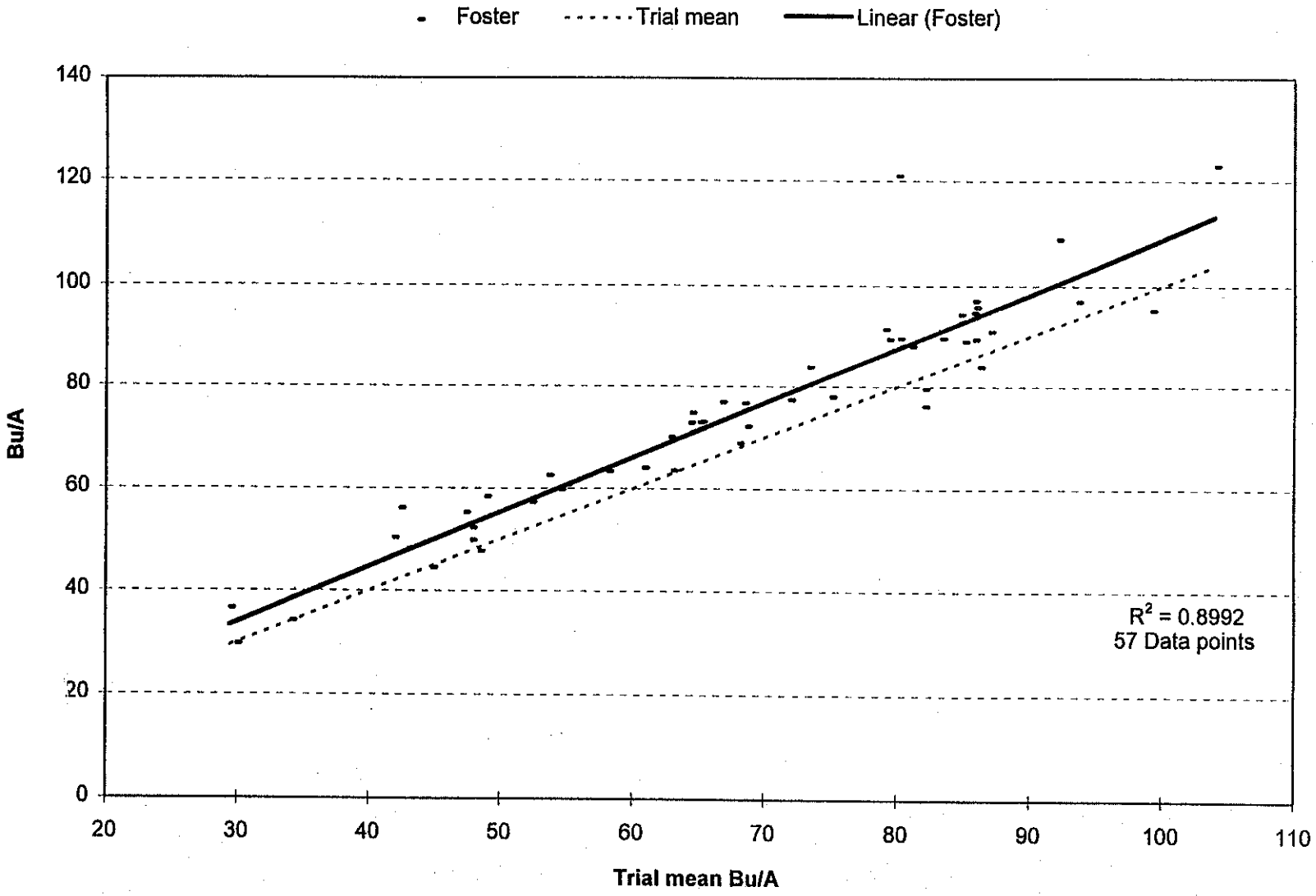
Variety	Yield (bu/a)	Test Wt. (lb/bu)	Height (in)	Lodging (%)	Heading Date	No. Obs. *	Yield ** LSD(0.05)
Foster	50.5	55.2	32.8	0	19 May	12	3.5
Jackson	45.7	55.8	31.6	0	20 May	12	3.5
FFR 555w	47.4	53.9	31.4	0	19 May	12	3.5
Coker 9803	44.4	56.8	29.7	0	19 May	12	3.5

* Means based on two years and six locations per year
** Computed from the combined ANOVA over locations and years

Yield, Test Weight, and Disease Ratings of Foster and FFR 555w in Kentucky , 1996, in Preliminary, Advanced, and Elite Trials in Kentucky in which Foster and FFR 555w were checks.

Variety	Yield (bu/a)	Test Wt. (lb/bu)	Powdery Mildew (0-9)	Septoria leaf blotch (0-9)	Leaf rust (% flag leaf; reaction)	Scab (no.heads)	No. Obs.
Foster	53.4 ± 5.0	53.8 ± 0.38	2	6.2	Trace; R	4.8	15
FFR 555w	47.8 ± 4.6	52.5 ± 0.56	2	6.3	80; S	9.8	15

Foster yield performance vs. Trial mean



2/13/96

Milling and Baking Quality - - 1994 Uniform Eastern Wheat Nursery

1994 UERN - COMBINED

ENTRY		MILLING QUALITY SCORE			BAKING QUALITY SCORE			COMBINED QUALITY SCORE			MICRO T.W. LB/BU			SOFT. EQUIV			FLOUR YIELD		
		NORTH	SOUTH	ATLAN	NORTH	SOUTH	ATLAN	NORTH	SOUTH	ATLAN	NORTH	SOUTH	ATLAN	NORTH	SOUTH	ATLAN	NORTH	SOUTH	ATLAN
CARDINAL	1	97.2	103.0	94.6	94.4	100.1	87.8	94.4	100.1	87.8	58.4	58.8	57.9	61.7	63.1	61.0	72.3	73.6	71.8
STANDARD → CALDWELL	2	97.4	99.7	102.9	95.2	103.1	101.2	95.2	99.7	101.2	57.6	57.1	57.4	66.4	68.7	68.7	71.8	72.1	72.9
PION 2548	3	84.1	95.2	90.3	70.6	95.3	75.9	70.6	95.2	75.9	58.8	58.1	58.1	64.3	66.5	64.4	68.5	71.1	70.2
IL 85-3132-1	4	95.3	96.8	100.3	97.7	105.6	99.8	95.3	96.8	99.8	59.9	59.5	60.3	66.0	66.8	61.9	71.0	71.4	72.8
T814	5	86.6	92.7	93.9	75.0	97.3	87.9	75.0	92.7	87.9	57.9	57.3	57.9	64.3	66.1	63.2	69.2	70.6	71.3
MO 9965-4	6	86.0	87.9	90.6	80.6	98.4	90.5	80.6	87.9	90.5	58.0	57.5	58.4	65.3	62.5	64.7	68.9	69.9	70.2
KY 83C-16-2	7	86.3	83.8	86.0	86.9	97.8	94.7	86.3	83.8	86.0	59.9	58.7	60.4	59.5	60.7	56.7	69.6	68.9	69.9
TN 83-328	8	99.3	99.6	99.8	94.7	103.9	92.8	94.7	99.6	92.8	60.4	59.9	60.6	63.6	63.7	59.3	72.4	72.5	73.1
TN 84-403	9	97.0	100.0	97.2	87.4	93.5	80.1	87.4	93.5	80.1	55.9	56.7	55.6	65.9	64.3	61.9	72.0	72.9	72.6
P80311A1-20-3-3	10	95.4	98.7	98.2	95.7	92.4	81.7	95.4	92.4	81.7	59.5	58.6	59.5	61.3	64.1	59.9	71.8	72.3	72.7
ABI 89-4580	11	98.4	100.0	99.6	91.2	103.1	89.0	91.2	100.0	89.0	59.1	58.5	59.4	67.4	67.2	64.7	71.7	72.2	72.4
MO 12256	12	88.0	89.3	88.9	86.3	101.1	91.1	86.3	89.3	88.9	59.1	57.9	59.0	58.0	60.4	58.7	70.4	70.5	70.5
GA 831585	13	90.6	96.7	96.4	73.6	93.1	88.8	73.6	96.7	88.8	59.3	59.9	59.2	58.8	60.1	56.7	70.9	72.2	72.7
VA 91-54-219	14	91.6	85.4	92.0	79.1	83.1	73.2	79.1	83.1	73.2	60.5	60.5	60.4	65.0	63.7	61.7	70.1	68.7	70.7
L 89-690	15	98.5	99.7	98.1	94.0	106.1	95.5	94.0	99.7	95.5	56.2	56.5	57.8	63.4	66.2	61.1	72.6	72.5	72.7
L 900819	16	89.0	87.2	89.7	67.9	81.5	60.7	67.9	81.5	60.7	60.0	59.3	60.8	53.0	56.8	49.5	71.2	70.3	71.8
AR 370-2-1	17	97.9	99.3	97.7	92.3	102.0	98.1	92.3	99.3	97.7	57.1	58.2	59.5	61.7	61.2	58.2	72.6	72.9	72.8
AR 361A-9-1	18	88.9	90.7	89.6	97.7	100.3	98.1	88.9	90.7	89.6	60.1	59.9	60.9	62.6	63.7	59.4	69.8	70.2	70.4
AR 361A-2-1	19	86.1	85.4	88.4	80.4	98.5	85.4	80.4	85.4	85.4	60.9	60.0	60.9	52.8	56.9	50.6	70.4	69.8	71.3
VA 91-54-222	20	86.3	87.5	90.7	60.9	89.1	69.2	60.9	87.5	69.2	60.0	59.9	59.3	62.1	63.0	60.6	69.2	69.4	70.7
TW 86-317	21	85.9	93.5	90.3	81.5	91.1	74.1	81.5	91.1	74.1	56.0	54.9	55.7	61.5	65.9	59.8	69.7	71.2	71.1
813811-16-5-50	22	92.5	97.6	93.1	90.3	102.2	96.0	90.3	97.8	93.1	58.3	58.4	59.1	62.3	61.5	58.5	71.0	72.5	71.6
MO 9965-52	23	89.7	88.6	88.7	94.7	104.7	88.8	89.7	88.6	88.7	57.8	57.0	58.5	62.0	64.5	61.3	70.4	69.9	70.1
X 1898-1	24	92.4	102.4	98.8	84.9	102.2	85.4	84.9	102.2	85.4	57.3	57.0	57.8	59.5	63.3	59.2	71.5	73.7	73.2
IL 87-1917-1	25	96.1	97.5	92.8	96.1	99.2	83.3	96.1	97.5	83.3	60.3	60.1	60.2	59.4	60.9	57.2	72.1	72.3	71.8
IL 87-5250-2	26	103.2	101.7	101.2	103.6	101.7	98.9	103.2	101.7	98.9	58.9	58.7	59.9	63.3	60.8	58.9	74.0	74.0	74.4
GA 84414-2	27	95.6	94.3	94.9	81.7	100.2	82.6	81.7	94.3	82.6	60.8	59.1	60.7	62.9	64.4	62.0	71.5	71.1	71.4
GA 84438	28	96.4	98.8	97.2	84.5	91.9	83.0	84.5	91.9	83.0	59.8	59.2	60.6	59.7	61.0	56.9	72.2	72.7	72.7
T71	29	97.3	99.0	99.9	107.5	98.1	91.5	97.3	98.1	91.5	56.5	56.3	58.0	67.9	70.0	64.7	71.7	71.8	72.6
FOSTER → KY 85C-31-6	30	101.0	100.9	101.2	104.1	105.4	92.4	101.0	100.9	92.4	58.3	57.8	60.4	63.8	65.4	58.4	73.0	72.8	73.7
KY 84C-48-1-1	31	94.4	95.2	96.3	87.8	86.0	99.2	87.8	86.0	96.3	59.8	58.5	60.0	57.1	58.4	58.5	72.1	72.2	72.3
ABI 90°7546	32	96.6	103.3	92.1	77.4	90.0	64.6	77.4	90.0	64.6	60.6	58.6	61.0	58.7	63.7	52.4	72.3	73.9	72.0
ABI 90°8476	33	99.8	101.3	101.9	96.3	90.6	93.1	96.3	90.6	93.1	57.8	58.2	57.8	67.7	63.1	62.6	72.2	73.2	73.5
ABI 89-4417A	34	87.2	91.4	85.8	85.3	103.4	91.0	85.3	91.4	85.8	58.2	58.1	58.7	62.3	63.7	58.1	69.7	70.6	69.8
OH 492	35	87.4	90.7	89.6	95.5	103.6	95.7	87.4	90.7	89.6	58.9	58.1	56.8	60.4	63.7	61.6	69.9	70.4	70.5
OH 498	36	91.4	94.4	90.8	96.5	94.9	79.2	91.4	94.4	79.2	59.1	58.5	59.6	63.3	63.0	58.7	70.5	71.4	70.9
PT 8930A	37	91.6	94.8	92.7	88.8	99.9	92.8	88.8	94.8	92.7	57.8	57.0	58.0	63.5	66.0	63.2	70.7	71.2	71.0
MEAN		92.9	95.2	94.4	88.1	97.7	87.4	86.9	93.4	86.4	58.8	58.3	59.1	62.1	63.4	59.9	71.1	71.6	71.8
MIN		84.1	83.8	85.8	60.9	81.5	60.7	60.9	81.5	60.7	55.9	54.9	55.6	52.8	56.8	49.5	68.5	68.7	69.8
MAX		103.2	103.3	102.9	107.5	106.1	101.2	103.2	102.2	101.2	60.9	60.5	61.0	67.9	70.0	68.7	74.0	74.0	74.4

Milling and Baking Quality - - 1994 Uniform Eastern Wheat Nursery

		1994 UERN - COMBINED								
ENTRY		FLOUR PROT			MICRO AWRC			COOKIE DIAM.		
		NORTH	SOUTH	ATLAN	NORTH	SOUTH	ATLAN	NORTH	SOUTH	ATLAN
CARDINAL	1	8.59	7.31	8.51	54	55.1	55.3	18.49	18.72	18.2
CALDWELL	2	8.71	8.70	7.47	56.7	56.5	55.5	18.53	18.8	18.58
PION 2548	3	9.24	6.84	7.32	57	57	57.5	17.43	18.57	17.75
IL 85-3132-1	4	9.04	7.11	8.14	55.7	55.6	55.7	18.54	18.94	18.81
T814	5	8.90	6.99	7.86	58.4	56.8	57.9	17.83	18.66	18.45
MO 9965-4	6	9.41	7.88	8.17	56.8	55.5	56.2	17.86	18.69	18.3
KY 83C-16-2	7	9.00	7.65	8.44	56.1	56.7	54.5	18.32	19.1	18.71
TN 83-328	8	9.31	7.54	9.06	54.3	55.3	54	18.43	19.05	18.51
TN 84-403	9	8.60	7.46	8.19	55.7	55.7	54.9	18.03	18.4	17.77
P80311A1-20-3-3	10	8.49	6.94	8.18	54	55.3	54.1	18.57	18.3	17.93
ABI 89-4580	11	8.84	7.44	8.24	56.9	56.7	57.5	18.31	18.98	18.39
MO 12256	12	9.06	7.07	7.69	53	55.3	54.4	18.24	18.89	18.45
GA 831585	13	10.51	7.29	8.56	53.5	56.1	54.9	17.58	18.85	18.42
VA 91-54-219	14	8.46	6.91	7.83	57	58.5	58.1	17.82	18.27	17.81
L 89-690	15	9.60	7.27	8.71	53	55.1	54.2	18.4	19.1	18.57
L 900819	16	9.19	7.15	9.02	56.2	57.2	58.6	17.65	18.3	17.75
AR 370-2-1	17	9.54	7.66	9.00	53.4	52.5	53.4	18.39	19.1	18.82
AR 361A-9-1	18	8.64	7.01	8.45	55.7	55.6	56	18.68	18.75	18.87
AR 361A-2-1	19	10.26	7.69	9.77	53	54.1	53.8	18.16	19.13	18.5
VA 91-54-222	20	9.07	6.98	8.05	58.9	58.4	58.8	17.28	18.58	17.74
TW 86-317	21	9.71	7.12	8.52	54.8	56.8	55.8	17.86	18.36	17.63
813811-16-5-50	22	9.26	7.92	9.06	53.2	52.5	53.3	18.26	19.04	18.7
MO 9965-52	23	9.41	7.69	8.85	55.3	54.8	56.1	18.5	19.09	18.34
X 1898-1	24	10.80	7.24	8.68	51.5	53.8	54.1	18.11	18.81	18.15
IL 87-1917-1	25	9.44	7.38	8.78	52.7	55.2	54.8	18.67	18.76	18.12
IL 87-5250-2	26	8.34	7.40	7.78	50.9	53.1	52.5	18.88	19.02	18.83
GA 84414-2	27	8.36	7.15	7.61	55.9	54.9	57.6	17.9	18.67	18.2
GA 84438	28	9.37	6.88	8.14	53.7	55.4	55.2	18.08	18.42	18.12
T71	29	8.67	6.72	8.04	55.2	56.5	57	18.98	18.5	18.45
KY 85C-31-6	30	9.01	7.07	8.49	54.2	54.4	55.6	18.98	19.02	18.57
KY 84C-48-1-1	31	9.56	7.50	8.14	53.7	54	54.2	18.35	18.21	18.86
ABI 90*7546	32	9.45	7.17	9.58	53.3	56.5	57	17.77	18.35	17.62
ABI 90*8476	33	9.11	7.34	8.49	56	55.9	55.7	18.44	18.33	18.45
ABI 89-4417A	34	8.98	7.04	8.53	54.5	55.5	56	18.01	19.15	18.57
OH 492	35	8.76	6.96	7.59	55.4	55.4	55.7	18.62	19.2	18.62
OH 498	36	8.36	7.29	8.65	53.2	55.2	57.5	18.53	18.46	18.15
PT 8930A	37	8.74	7.09	7.96	53.9	55.8	56	18.14	18.66	18.45
MEAN		9.13	7.24	8.36	54.8	55.5	55.7	18.23	18.74	18.33
MIN		8.34	6.70	7.32	50.9	52.5	52.5	17.28	18.21	17.62
MAX		10.80	7.92	9.77	58.9	58.5	58.8	18.98	19.20	18.87

Superior milling quality reflects high break flour yield and high softness equivalent. A combination of low protein, low AWRC, high cookie diameter, and high SE lead to a high baking quality score. Both milling and baking quality scores are reported in %, and compared to a lab standard assigned a value of 100 %. The combined quality score reflects the lesser of the milling and baking quality scores.

ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

STD =AVERAGE OF THREE CALDWELL ENTRIES

1995 Uniform Eastern Nursery

	ENTRY	MILLING QUALITY SCORE			BAKING QUALITY SCORE			COMBINED QUALITY SCORE		
		N	S	ATL	N	S	ATL	N	S	ATL
1	CARDINAL	100.1	99.0	93.5	92.0	89.3	77.9	92.0	89.3	77.9
2	CALDWELL (STD)	101.3	94.6	104.1	97.3	104.6	98.4	97.3	94.6	98.4
3	PION. 2548	92.5	91.8	88.5	75.4	74.8	60.0	75.4	74.8	60.0
4	L 900819	95.0	92.5	93.5	79.1	79.6	73.7	79.1	79.6	73.7
5	AR 361A-9-1	87.7	85.4	92.7	90.7	95.8	82.5	87.7	85.4	82.5
6	MO 9965-52	93.8	90.5	97.6	97.9	91.3	90.0	93.8	90.5	90.0
7	X 1898-1	97.2	100.5	103.6	97.9	101.4	96.8	97.2	100.5	96.8
8	IL 87-1917-1	92.6	101.5	97.5	87.9	96.1	87.8	87.9	96.1	87.8
9	IL 87-5250-2	102.2	101.1	101.6	98.5	96.6	82.1	98.5	96.6	82.1
10	GA 84414-2	89.6	89.6	96.9	79.2	82.5	81.8	79.2	82.5	81.8
11	T 71	94.1	95.4	102.5	93.4	95.0	81.2	93.4	95.0	81.2
12	KY 85C-31-6 (FOSTER)	102.5	103.2	103.2	96.2	103.7	96.8	96.2	103.2	96.8
13	OH 498	87.8	90.7	93.0	84.0	92.8	91.8	84.0	90.7	91.8
14	EH 9408	89.9	92.7	95.4	67.9	71.8	80.0	67.9	71.8	80.0
15	MO 12258	88.0	93.6	93.5	93.3	92.1	87.1	88.0	92.1	87.1
16	MO 91-1003	94.5	99.3	99.7	100.5	101.9	101.9	94.5	99.3	99.7
17	TW 90401	93.3	91.6	98.1	104.7	104.5	101.7	93.3	91.6	98.1
18	AR 26158-4	100.0	98.3	99.6	99.9	101.0	93.7	99.9	98.3	93.7
19	KY 85C-33-24-16-1-3	77.5	80.1	82.5	72.2	78.5	75.7	72.2	78.5	75.7
20	XW 532	90.0	85.1	88.7	95.3	84.8	87.5	90.0	84.8	87.5
21	XW 535	84.9	97.2	93.8	92.7	94.3	98.3	84.9	94.3	93.8
22	PA 8769-152	93.0	87.4	94.2	101.5	100.0	88.8	93.0	87.4	88.8
23	PA 8769-158	91.9	84.1	98.9	102.5	99.3	87.9	91.9	84.1	87.9
24	L 910097	92.8	93.3	99.0	91.5	93.3	87.7	91.5	93.3	87.7
25	L 910568	93.7	94.5	94.5	79.0	86.3	74.4	79.0	86.3	74.4
26	86981RC1-9-4-X	88.5	87.5	98.5	95.6	85.4	98.6	88.5	85.4	98.5
27	86340C1-22-5-2	93.3	93.8	96.3	89.9	88.6	87.0	89.9	88.6	87.0
28	IL 89-64863	95.7	94.8	96.7	100.6	95.9	99.0	95.7	94.8	96.7
29	T 8141	92.8	91.7	97.5	82.8	76.2	81.3	82.8	76.2	81.3
30	VA 93-52-60	101.0	100.0	100.9	86.5	80.3	84.6	86.5	80.3	84.6
31	VA 93-54-185	98.0	94.5	101.9	81.9	78.2	77.9	81.9	78.2	77.9
32	VA 94-51-20	97.8	99.4	99.4	91.4	99.8	86.0	91.4	99.4	86.0
33	A 89-4032A-1	92.0	94.6	98.1	93.3	87.3	82.4	92.0	87.3	82.4
34	A 92-3122	84.3	86.8	89.5	75.5	79.8	76.4	75.5	79.8	76.4
35	A 92-3327	87.0	86.4	88.9	65.8	68.4	62.2	65.8	68.4	62.2
36	A 92-3409	93.7	91.6	93.9	77.3	79.6	74.4	77.3	79.6	74.4
37	OH 526	92.9	94.8	95.3	88.9	94.2	88.9	88.9	94.2	88.9
38	OH 530	99.7	96.4	102.1	100.4	105.7	101.5	99.7	96.4	101.5
	MINIMUM	77.5	80.1	82.5	65.8	68.4	60.0	65.8	68.4	60.0
	MAXIMUM	102.5	103.2	104.1	104.7	105.7	101.9	99.9	103.2	101.5
	MEAN	93.2	93.3	96.5	89.5	90.3	85.9	87.5	88.1	85.6

EXHIBIT D.

ADDITIONAL DESCRIPTION OF FOSTER

Foster is a soft red winter wheat developed by the Kentucky Agricultural Experiment Station. It was derived from the cross KY 83-60 / 'Tyler' // KY 83-75. Foster is a high yielding, strong strawed, medium height wheat with mid-season maturity. Foster offers resistance to the most prevalent races of leaf rust and powdery mildew in its area of adaptation. It offers moderate resistance to Septoria leaf and glume blotches and moderate resistance to spindle streak mosaic virus. Foster has good test weight and superior milling and baking quality.

Juvenile growth habit is semi-erect. Plant color at boot stage is green. The flag leaf at booting is erect. Auricle anthocyanin is absent and auricle hairs are present. Waxy bloom is present on the stem, flag leaf sheath and spike. The head is tapering, awnletted and lax. Spike position at maturity is recurved. Glumes are long and narrow with square shoulders and obtuse beaks. Seed shape is ovate. The seed brush is long in length and large in size. Seed cheeks are rounded.

Foster is well adapted to the states of the southern corn belt, including Kentucky, Indiana, Illinois, and Ohio. It also shows some adaptation to Arkansas, Tennessee, and the Atlantic coast states including Virginia and North Carolina.

REPRODUCE LOCALLY. *Include form number and date on all reproductions.* FORM APPROVED - OMB NO. 0581-0055 EXPIRES: 12-31-96

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY DIVISION - PLANT VARIETY PROTECTION OFFICE

EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S)

Kentucky Agricultural Experiment Station

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER

KY 85C-31-6

3. VARIETY NAME

Foster

4. ADDRESS *(Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)*

S-123 Agricultrual Science Bldg. North
University of Kentucky
Lexington, KY 40546-0091

5. TELEPHONE *(include area code)*

606-257-4772

6. FAX *(include area code)*

606-257-2185

7. PVPO NUMBER 9700119

8. Does the applicant own all rights to the variety? *Mark an "X" in appropriate block.* If no, please explain. [X] YES [ ] NO

9. Is the applicant (individual or company) a U.S. national or U.S. based company? If no, give name of country _____ [X] YES [ ] NO

10. Is the applicant the original breeder? If no, please answer the following: [X] YES [ ] NO

a. If original rights to variety were owned by individual(s): Is (are) the original breeder(s) a U.S. national(s)? If no, give name of country _____

b. If original rights to variety were owned by a company: Is the original breeder(s) U.S. based company? If no, give name of country _____ [ ] YES [ ] NO

11. Additional explantion on ownership *(If needed, use reverse for extra space):*

See Attachment

PLEASE NOTE:

Plant variety protection can be afforded only to owners (not licensees) who meet one of the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.

2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.

3. If the applicant is an owner who is not the original breeder, both the original breeder and the applicant must meet one of the above criteria.

The original breeder may be the individual or company who directed final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definition.

EXHIBIT E. (ATTACHMENT)

STATEMENT OF THE BASIS OF APPLICANT'S OWNERSHIP

The variety for which Plant Variety Protection is hereby sought was developed by Dr. David Van Sanford who is an employee of the Kentucky Agricultural Experiment Station.